

## Setting out towards health-promoting orientational foundations for moving and transferring patients

### **- Expanding and studying support for the problem-solving competency of nursing staff through ergonomic principles of movement -**

**A study by the Federal Institute of occupational Safety and Health (BAuA), which looks for good practices in implementing the prevention programme Back-Protective Patient Transfer (BPPT), shows the success of tapping into the experiences and competencies of that professional group, systematising them based on underlying principles and thus coming up with independent situation- and patient-related problem-solving competencies. When long-term implementation is based on participation, health-promoting effects are achieved for both staff and patients. Training instructors and including them in the organisational structures of the institution contributes towards developing in-house expertise. Initial steps have been taken towards developing institutional guidelines incorporating all the movement concepts for nursing. A network is being created to promote the discussion of binding national guidelines on an ergonomic basis.**

Discussions in the field of occupational policy—whether among active nursing staff or health care management professionals—do not yet adequately recognise the importance of studying ergonomics in connection with moving patients. This is not simply a matter of focusing attention on increasing physical strain and the growing risk of back disorders, but also of the need for establishing in the long term that ergonomics provide important orientational foundations in the context of quality management in the field of patient mobility. This lack of discussion may perhaps be due to the fact that the meaning of ergonomics in the field of nursing has not been clearly defined so far; since the term is, after all, commonly associated more with technical features.

### **What does ergonomics mean and what role can it play in nursing?**

Based on the general definition adopted here, ergonomics is first of all the science used to develop rules for assessing human labour (definition according to Laurig).

Ergonomics deals with the task to be done and the means of coping with it, with the design of the workplace, the aids used and the organisational design of the workplace. Its aim is to improve work procedures while minimising strain and improving the work outcome. Ergonomic occupational design therefore includes a multitude of aspects, calling for a precise understanding of the task to be done, and can benefit from the experiences and the competence of members of the profession particularly in its attempt to produce simple, practical and strain-reducing solutions. Ergonomic experience and thinking in ergonomic terms on the part of the workforce can refer both to the way in which tasks are carried out—thus being behaviour-related—and also to aspects of working conditions—and hence contribute to improving ergonomic conditions at the workplace (e.g. by changing the physical design of the workplace, the way in which work is organised). Ergonomic thinking and planning is therefore also a management task, which in many institutions makes use of the staff resources, for instance by utilising the institution's improvement management.

The programme Back- Protective Patient Transfer (BPPT) tries to make these aspects accessible for nursing too. This means on the one hand that staff is trained to evaluate ergonomic experiences and assessments, and given practical coaching; on the other hand, if trained staff chooses not to adopt the jointly developed solutions in practice, then this too must

be taken seriously. Because on more careful examination this will often be found to have perfectly comprehensible reasons, which necessitate the development of new solutions. Because ideally ergonomics should undergo a process of constant improvement.

### **Developing adapted solutions on site by means of principles**

The programme takes this into account by communicating principles of ergonomic movement and transfer right from the start in the form of orientational foundations. These principles are used to optimise a number of familiar techniques and can, if necessary, lead to the development of new techniques, with the assistance of the instructors. The small, subjectively noticeable difference that characterises ergonomic movement and transfer is often a matter of detail.

Beyond this, the programme also formulates the foundations for minimum criteria when creating an ergonomic framework and for implementation management, which make it clear at what point behavioural solutions alone cannot be effective and it is essential for the employer to take appropriate measures. Instructors learn to carry out situational analyses on site, which can lead to additional measures in connection with the team involved (e.g. trying out aids or more suitable aids, or else other improvements to the equipment). This can subsequently also lead to the improvement and optimisation of the purchasing activities, for instance, by only buying things that will later actually be used. In many cases, developing tailor-made solutions is also a question of the concrete context of the specific task (e.g. changes in work organisation), taking into account specific requirements (therapeutic requirements, specific handicaps, patient wishes) and removing existing deficits in training. Such solutions require tuning on other levels and call for the instructors to collaborate with each other and to be included as part of a long-term change management programme.

The entire implementation is first taken care of by a project management team and later in the context of the established structures of a change management programme. In concrete terms, this may take very different forms, depending on the specific institutional needs and aims. Some basic recommendations for good practice have proven to be effective. Thus it is particularly important to make use of the possibility of suggesting improvements in the implementation process itself but also in individual tailor-made solutions, through an accompanying evaluation and integration of staff creativity. It is advisable on principle to establish an in-house goal consensus and to plan the corresponding implementation structures in the long term. In some institutions with longer-term implementation experience, in-house guidelines are already being developed and tested. However so far there are no extra-institutional orientational foundations for institutions offering binding recommendations, independently of specific concepts and methods.

### **Health promotion through an ergonomic prevention programme**

Such an implementation permits many experiences of empowerment within the professional group, stimulates creative potential, generates pleasure in one's work and produces a willingness to take responsibility for change. In the implementation context, the need for and possibilities of using existing specific movement concepts in nursing have to be defined more precisely and optimised in line with ergonomic criteria. This benefits the staff and the patients. It is not a matter of competing concepts, but of weighing up when making professional decisions, of the quality of care in health care institutions, and health promotion under multifarious aspects. It is advantageous to include other professions from the start, in particular physiotherapy, in the implementation and self-perception of working ergonomically, in order for decisions to be made in a problem-related way as appropriate for the situation. Health care institutions can use the

programme as a basis for determining their goals and adapt it to the concrete needs on the ground.

### **Getting started and the outlook for better orientation**

This programme is, nevertheless, only a small beginning, because many experiences still need to be corroborated scientifically. A connection has yet to be forged between occupational scientific findings, and the issues and specific questions posed by nursing and health care sciences—the development of ergonomic guidelines and standards for moving and transferring patients. The experiences with implementing the prevention programme represent an important foundation for discussions and practical research, in order to make progress on the way to evidence-based recommendations based upon differentiated assessments—taking into account ergonomics. In this connection, experiences made in the UK and Holland can be built upon. Initial steps in this direction are already being discussed.

**Information about the development of the prevention programme Back-Protective Patient Transfer** The concept is based on deliberations, observations of activities and biomechanical analyses conducted at the University Orthopaedic Clinic Hamburg-Eppendorf (Soyka et al. 1993)<sup>\*1</sup>. The foundations of the programme were presented in detail by Soyka et al. In 1996 <sup>\*2</sup>. Experiences with the first training courses led to improvements in the programme, which were presented in 2000 in the fundamental book “Back-Protective Patient Transfer in Hospitals and Nursing Homes ” (Soyka et al, 2000) <sup>\*3</sup> .

### **References:**

<sup>\*1</sup> Soyka M, Hollenrieder J, Deuretzbacher G, Lüssenhopp S, Rehder U, (1993)

Rückengerechtes Heben und Bewegen von Patienten – Ergebnisse und Auswertungen eines Workshops der Landesunfallkasse Hamburg. Broschüre Hamburg

<sup>\* 2</sup> Soyka M, Rehder U ( 1996) Die Entwicklung des Präventionsprogramms „Rückengerechter Patiententransfer in der Kranken- und Altenpflege“, Orthopädische Praxis 32, (6): 373-379

<sup>\*3</sup> Soyka M (2000) Rückengerechter Patiententransfer in der Kranken- und Altenpflege - ein ergonomisches Training